

ABSTRACT

Auto-Negotiation of Transceiver Roles in Communication Systems

The present invention allows a transceiver unit to freely and automatically choose whether it will operate as a central unit or as a remote unit, depending on the capabilities of the peer transceiver unit, which it is connected to. The transceiver unit listens first to any signal the peer may transmit to initiate the handshake procedure. Such a signal would de facto identify the peer as a remote unit or as a central unit and would allow the transceiver unit to select the appropriate role. If no signal is detected, the transceiver unit tries to initiate the handshake procedure and waits for the corresponding signal from the peer. In a first embodiment, the transceiver unit tries to initiate the handshake procedure as a remote unit only. In a second embodiment, the transceiver unit tries to initiate the handshake procedure, or it may try both as a central unit and as a remote unit.